

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8428 (1977): Grading for KARANJA seeds for oil milling  
[FAD 13: Oils and Oilseeds]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



IS : 8428 - 1977

*Indian Standard*

GRADING FOR *KARANJA* SEEDS FOR  
OIL MILLING

UDC 631.531.1 : 633.852.537 : 620.168



© Copyright 1977

INDIAN STANDARDS INSTITUTION  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

Price Rs 5<sup>00</sup>



August 1977

# Indian Standard

## GRADING FOR KARANJA SEEDS FOR OIL MILLING

Oils and Oilseeds Sectional Committee, CAFDC 5

### Chairman

DR J. S. BADAMI

### Representing

Swastik Household & Industrial Products Ltd,  
Bombay

### Members

SHRI M. A. BHATT (Alternate to Dr J. S. Badami)	Directorate of Marketing & Inspection (Ministry of Agriculture), Nagpur
AGRICULTURAL MARKETING ADVISER TO THE GOVERNMENT OF INDIA	
SHRI T. V. MATHEW (Alternate)	
DR B. P. BALIGA	The Tata Oil Mills Co Ltd, Bombay
DR N. L. MURTHY (Alternate)	
SHRI S. K. BOSE	National Test House, Calcutta
SHRI D. S. CHADHA	Central Committee for Food Standards (Directorate General of Health Services), New Delhi
SMT DEBI MUKHERJEE (Alternate)	
PROF M. M. CHAKRABARTY	Oil Technologists Association of India, Kanpur
PROF A. C. GUPTA (Alternate)	
SHRI P. V. GUJARATHI	Khadi & Village Industries Commission, Bombay
SHRI V. LAKSHMIKANTHAN (Alternate)	
SHRI H. P. GUPTA	East India Oil Millers' Association, Calcutta
SHRI R. R. MUSSADI (Alternate)	
SHRI B. V. KANTAK	Godrej Soaps Ltd, Bombay
SHRI M. S. THAKUR (Alternate)	
DR A. R. S. KARTHA	Indian Council of Agricultural Research, New Delhi
SHRI R. D. KAWATRA	Directorate General of Technical Development, New Delhi
DR G. LAKSHMINARAYANA	Regional Research Laboratory (CSIR), Hyderabad
DR S. N. MAHAPATRA	Regional Research Laboratory (CSIR), Bhubaneswar
DR C. SRINIVASULU (Alternate)	
SHRI J. P. PATEL	Italab Pvt Ltd, Bombay
SHRI J. C. DEY (Alternate) (Calcutta)	
SHRI S. S. HONAVAR (Alternate) (Madras)	

(Continued on page 2)

© Copyright 1977

INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

### Representing

DR S. M. PATEL	Hindustan Lever Ltd, Bombay
SHRI K. BALAKRISHNAN ( <i>Alternate</i> )	
SHRI M. K. RAHMAN	Solvent Extractors' Association of India, Bombay
SHRI L. KRISHAN KUMAR ( <i>Alternate</i> )	
SHRI P. RAMDAS	Central Warehousing Corporation, New Delhi
SHRI S. SAMPATH KUMAR ( <i>Alternate</i> )	
DR A. K. SEN	Ministry of Defence ( DGI )
SHRI P. N. AGARWAL ( <i>Alternate</i> )	
SHRI HARISE SETBI	Directorate of Oilseeds Development ( Ministry of Agriculture ), Hyderabad
SHRI S. C. SINGHAL	The Vanaspati Manufacturers' Association of India, Bombay
DR M. R. SUBBARAM	Directorate of Vanaspati, Vegetable Oils and Fats ( Ministry of Commerce, Civil Supplies & Co-operation ), New Delhi
DR I. A. SIDDIQI ( <i>Alternate</i> )	
SHRI S. D. THIRUMALA RAO	Oil Technological Research Institute, Anantapur
SHRI D. ATCHUTARAMAYYA ( <i>Alternate</i> )	
DR G. M. SAXENA, Director ( Chem )	Director General, ISI ( <i>Ex-officio Member</i> )

SHRI R. K. SINGH  
Assistant Director (Chem), ISI

## Oilseeds Subcommittee, CAFDC 5 : 5

**SRI N. S. MAINI** Ministry of Agriculture, New Delhi

<b>AGRICULTURAL MARKETING</b>	<b>Directorate of Marketing &amp; Inspection ( Ministry</b>
<b>ADVISER TO THE GOVERNMENT OF</b>	<b>of Agriculture ), Nagpur</b>
<b>INDIA</b>	
<b>SHRI T. V. MATHEW ( Alternate )</b>	
<b>DR I. J. ANAND</b>	<b>Indian Agricultural Research Institute, New Delhi</b>
<b>SHRI S. S. BAL</b>	<b>National Seeds Corporation Ltd, New Delhi</b>
<b>SHRI C. S. MURTHY ( Alternate )</b>	
<b>SHRI PREMJI BHANJI</b>	<b>The Grain Rice &amp; Oilseeds Merchants' Association,</b>
	<b>Bombay</b>
<b>SHRI VASANJI LAKHAMSI ( Alternate )</b>	
<b>SHRI D. K. GANGULY</b>	<b>Inspector General of Forests, New Delhi</b>
<b>DR G. LAKSEMINARAYANA</b>	<b>Regional Research Laboratory ( CSIR ),</b>
	<b>Hyderabad</b>
<b>SHRI H. H. LILLANEY</b>	<b>The Central Organization for Oil Industry and</b>
	<b>Trade, Bombay</b>
<b>SHRI V. K. BANSAL ( Alternate )</b>	
<b>SHRI S. K. MAJUMDAR</b>	<b>Central Food Technological Research Institute</b>
	<b>( CSIR ), Mysore</b>

( Continued on page 6 )

## *Indian Standard*

# GRADING FOR *KARANJA* SEEDS FOR OIL MILLING

### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 5 May 1977, after the draft finalized by the Oils and Oilseeds Sectional Committee had been approved by the Chemical Division Council and the Agricultural and Food Products Division Council.

**0.2** *KARANJA* seeds are obtained from the tree *Pongamia pinnata* (Linn.) Merr. syn. *Pongamia glabra* Vent., fam. Leguminosae. Although this tree grows practically throughout India, Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra are the areas where *KARANJA* seeds are largely available.

**0.3** The oil obtained from *KARANJA* seeds is covered in IS : 3492-1965\*. *KARANJA* oil is yellow in colour having unpleasant smell, bitter taste and is mainly used in the tanning industry, manufacture of soaps and as a lubricant.

**0.4** In the preparation of this standard substantial assistance has been derived from the data supplied by Khadi and Village Industries Commission, Bombay; Oil Technological Research Institute, Anantapur; and Directorate of Oilseeds Development, Hyderabad; which is thankfully acknowledged.

**0.5** This standard contains clause 5.1 which calls for agreement between the purchaser and the supplier.

**0.6** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

### 1. SCOPE

**1.1** This standard prescribes methods of grading and requirements for *KARANJA* seeds for oil milling, along with the methods of sampling and test.

\*Specification for *KARANJA* oil.

†Rules for rounding off numerical values (revised).

## 2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given under 2 of IS : 3579-1966\* shall apply.

## 3. GRADES

3.1 The *KARANJA* seeds shall be of two grades, namely, Grade 1 and Grade 2.

## 4. REQUIREMENTS

4.1 The material shall be derived from the tree *Pongamia pinnata* (Linn.) Merr. syn. *Pongamia glabra* Vent., fam. Leguminosae. The material shall be clean.

4.2 The material shall also comply with the requirements given in Table 1.

**TABLE 1 REQUIREMENTS FOR KARANJA SEEDS FOR OIL MILLING**

Sl No.	CHARACTERISTIC	REQUIREMENT FOR		METHOD OF TEST (REF TO CL No. IN IS : 3579-1966*)
		Grade 1	Grade 2	
(1)	(2)	(3)	(4)	(5)
i)	Damaged, slightly damaged, weevilled and dark seeds, percent by mass, <i>Max</i>	4	6	4
ii)	Impurities, percent by mass, <i>Max</i>	1	2	
iii)	Other oilseeds, percent by mass, <i>Max</i>	To be reported		
iv)	Shrivelled, immature and dead seeds, percent by mass, <i>Max</i>	1	2	
v)	Total of Sl No. (i) to (iv)	5	8	—
vi)	Moisture content, percent by mass, <i>Max</i>	8	10	5.1
vii)	Oil content, percent by mass, <i>Min</i>	37	33	5.2
viii)	Acid value of extracted oil, <i>Max</i>	4	10	5.3

\*Methods of test for oilseeds.

## 5. PACKING

5.1 The material shall be packed in clean, dry, sound, single, new or unmended hessian bags in merchantable condition, as agreed to between the purchaser and the supplier.

\*Methods of test for oilseeds.



## 6. MARKING

6.1 The material shall be marked with the following particulars:

- a) Name and grade of the material,
- b) Net mass,
- c) Year of the crop, and
- d) The source of supply.

## 7. SAMPLING

7.1 Representative samples of the material shall be drawn as prescribed in IS : 4115-1967\*.

## 8. TESTS

8.1 Tests shall be carried out as prescribed in IS : 3579-1966†. Reference to relevant clauses of that standard is given in col 5 of Table 1.

8.2 **Quality of Reagents** — Unless specified otherwise, pure chemicals and distilled water ( *see* IS : 1070-1960‡ ) shall be employed in the tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

---

\*Methods of sampling of oilseeds.

†Methods of test for oilseeds.

‡Specification for water, distilled quality ( *revised* ).

( Continued from page 2 )

<i>Members</i>	<i>Representing</i>
SHRI S. N. MITRA	Botanical Survey of India, Calcutta
SHRI R. R. MUSSADI	East India Oil Millers' Association, Calcutta
DR S. M. PATEL	Hindustan Lever Ltd, Bombay
SHRI K. BALAKRISHNAN ( <i>Alternate</i> )	
DR S. S. RAJAN	Indian Council of Agricultural Research, New Delhi
SHRI P. RAMDAS	Central Warehousing Corporation, New Delhi
SHRI LAKSHMINARAYAN	The Spices & Oilseeds Merchants Association, Bombay
CHATURBHUJ SARDA	
SHRI BABULAL SWARUP CHAND	
SHAH ( <i>Alternate</i> )	
SHRI M. SATYANARAYANA	The Tata Oil Mills Co Ltd, Bombay
SHRI T. S. RAMASWAMY ( <i>Alternate</i> )	

Panel for Drafting Specifications for Oilseeds, CAFDC 5 : 5 : 1

<i>Convener</i>	
SHRI V. LAKSHMIKANTHAN	Khadi & Village Industries Commission, Bombay
<i>Members</i>	
DR G. LAKSHMINARAYANA	Regional Research Laboratory ( CSIR ), Hyderabad
SHRI N. K. MURALIDHARA RAO	Directorate of Marketing & Inspection ( Ministry of Agriculture ), Nagpur
SHRI T. V. MATHEW ( <i>Alternate</i> )	
REPRESENTATIVE	Swastik Household & Industrial Products Ltd, Bombay

**INDIAN STANDARDS**  
**ON**  
**OILS AND FATS AND RELATED MATERIALS**

- IS :
- 75-1973 Linseed oil, raw and refined (*second revision*)
  - 435-1973 Castor oil (*second revision*)
  - 542-1968 Coconut oil (*second revision*)
  - 543-1968 Cottonseed oil (*second revision*)
  - 544-1968 Groundnut oil (*second revision*)
  - 545-1968 *MAHUA* oil (*second revision*)
  - 546-1975 Mustard oil (*second revision*)
  - 547-1968 Sesame oil (*second revision*)
  - 548 (Part I)-1964 Methods of sampling and test for oils and fats: Part I Methods of sampling, physical and chemical tests (*revised*)
  - 548 (Part II)-1976 Methods of sampling and test for oils and fats: Part II Purity test (*third revision*)
  - 595-1956 Blown rape (or mustard) oil for use in lubricants
  - 877-1971 Methods of sampling and test for activated carbon used for decolorizing vegetable oils and sugar solution
  - 887-1968 Animal tallow (*first revision*)
  - 1035-1972 Methods of sampling and test for bleaching earths (*second revision*)
  - 1675-1971 Stearic acid, technical (*first revision*)
  - 1676-1960 Oleic acid, technical
  - 1780-1961 Vegetable tallow
  - 1796-1960 Crude glycerine and refined glycerine
  - 1965-1971 Bleaching earth of Indian origin used for decolorizing vegetable oils (*first revision*)
  - 3448-1968 Rice bran oil (*first revision*)
  - 3470-1966 Hexane, food grade
  - 3490-1965 Nigerseed oil
  - 3491-1965 Safflower oil
  - 3492-1965 *KARANJA* oil
  - 3579-1966 Methods of test for oilseeds
  - 4054-1966 Neatsfoot oil
  - 4055-1966 Maize (corn) oil
  - 4056-1966 Fish oil for leather industry
  - 4088-1966 *KUSUM* oil
  - 4115-1967 Methods for sampling of oilseeds
  - 4276-1976 Soybean oil (*first revision*)
  - 4277-1975 Sunflower oil (*first revision*)
  - 4427-1967 Grading for groundnut kernels for oil milling and for table use
  - 4428-1967 Grading for mustard seeds for oil milling
  - 4429-1967 Grading for sesame seeds for oil milling
  - 4617-1968 Grading for linseed for oil milling

IS :

- 4618-1968 Grading for castor seeds for oil milling
- 4619-1968 Grading for *MAHUA* kernels for oil milling
- 4620-1968 Grading for cotton seeds for oil milling
- 4765-1975 *NEEM* kernel and depulped *NEEM* seed oil ( *first revision* )
- 5292-1969 Grading for safflower seeds for oil milling
- 5293-1969 Grading for niger seeds for oil milling
- 5294-1969 Grading for *KUSUM* seeds for oil milling
- 5614-1970 Tobaccoseed oil
- 5637-1970 Watermelon seed oil
- 5638-1970 Acid oil ( cottonseed and groundnut )
- 5686-1970 Code of practice for handling and storage of oilseeds
- 6220-1971 Grading for copra for table use and for oil milling
- 7375-1974 Salseed fat
- 7787-1975 Grading for *NEEM* kernels and depulped *NEEM* seeds for oil milling
- 7797-1975 Grading for soybean for oil milling
- 7798-1975 Grading for sunflower seeds for oil milling
- 8323-1977 Palm oil
- 8361-1977 Palmolein